

# **Pandemic Influenza Plan – Surveillance, Investigation and Data/Information Sharing**

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## **PLANNING ASSUMPTIONS**

- The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) will coordinate surveillance at the international and national level.
- It is unlikely, but not impossible, that the first cases in the United States will arise in Missouri. While this will give us some time to institute enhanced surveillance, this “lead time” is apt to be quite short due to issues associated with the speed and frequency of transportation.
- Identification of the initial cases in Missouri will be highly important to guiding early containment and control responses.
- As the pandemic progresses in Missouri, disease surveillance systems may be overwhelmed.
- Illness, disruption and death will result in significant reductions in the personnel available to perform these tasks at the very time the workload is greatest.
- Disruption of normally available goods and services, such as public utilities, food and fuel may post significant barriers to information gathering, analysis and dissemination.
- Despite the potential barriers to the efficient operation of our surveillance systems, the information gathered by those systems will be of vital importance in making decisions regarding the Public Health reaction to the progress of the pandemic.
- As the pandemic progresses further in Missouri, surveillance activities should shift away from individual case identification and toward identifying areas of need. This will require a flexible system that can adapt to assess not only the occurrence of illness and death, but also the availability (or lack thereof) of items ranging from medical supplies, equipment and facilities to food, fuel and the necessities of life.

## **BACKGROUND**

### **WHO Pandemic Phases 1-3**

Surveillance for influenza will be part of both active and passive routine disease surveillance as described in Attachment A.

### **WHO Pandemic Phases 4-6**

(Influenza moves from rare human-to-human transmission (i.e., phase 3) to increased human-to-human transmission (i.e., phase 4) and beyond to efficient and sustained human to human transmission (i.e., phase 6)).

## LEVELS OF RESPONSE

### When pandemic influenza (PI) is identified in the World, but not yet in the United States:

- Using statewide and local Health Alert Networks (HAN) and the EMSsystem, mandated disease reporters (providers, laboratories and hospitals) will be notified of the current situation. They will be reminded of the necessity for rapid testing and the need for accurate and rapid case reporting. Novel strains of influenza with pandemic potential should be reported immediately as defined by the reportable disease rule. Disease reporters will also be reminded of the limitations of rapid testing and that positives should be confirmed by polymerase chain reaction (PCR) testing whenever possible, especially as early cases in their geographical area are identified.
  - The Laboratory Preparedness Annex contains specific information regarding the submission of laboratory specimens. Virus cultures should **not** be attempted from patients suspected of having pandemic influenza.
- Providers who are members of the sentinel surveillance system will be asked to submit specimens on any cases that are of epidemiological interest, defined as those persons who recently traveled to regions where the pandemic strain of influenza is circulating or those with unusual and/or severe symptoms.
- Supplementary sentinel sites will be identified and readied for use when/if the Pandemic reaches the Western Hemisphere.
- Guidelines for reporting detailed, supplementary information (above and beyond the information required by 19 CSR 20-20.020) will be distributed to all mandated disease reporters as part of the Health Alert.\* Copies of the reporting form<sup>§</sup> will be included in the Health Alert and downloadable copies will be posted on the Missouri Department of Health and Senior Services (DHSS) website.
  - Supplementary information will include all information normally required for other disease case reports.
    - "...a case report as required in section (6) of this rule shall include the patient's name, home address with zip code, date of birth, age, sex, race, home phone number, name of disease, condition or finding diagnosed or suspected, the date of onset of the illness, name and address of the treating facility (if any) and the attending physician, any appropriate laboratory results, name and address of the reporter, ... and the date of report...." [19 CSR 20-20.020 (7)]
  - Additional information about travel to or contact with people from areas where Pandemic Influenza is known to be occurring and,
  - Vaccination history.
  - Reporting requirements can be tailored to CDC requests for specific information and will be submitted daily via National Electronic Communications System for Surveillance (NETSS), or as otherwise requested by CDC.

\* This change in reporting requirements can be made by the Director of the Missouri Department of Health and Senior Services (DHSS) or their designee.

§ A copy of the Pandemic Influenza Case Report is included as Attachment B.

**When PI is identified in the United States (or anywhere in the Western Hemisphere):**

- Mandated disease reporters (providers, laboratories and hospitals) will be notified of the current situation. They will be advised of the change in the reporting status for all types of influenza from weekly, aggregate reporting to immediate, detailed reporting of all diagnosed or suspected cases. They will be reminded of the necessity for rapid testing, and for the need for accurate and rapid case reporting of this immediately reportable condition. They will also be reminded of the limitations of rapid testing and that positives should be confirmed by PCR, especially as early cases in their geographical area are identified.
  - The Laboratory Preparedness Annex contains specific information regarding the submission of laboratory specimens. Virus cultures should **not** be attempted from patients suspected of having pandemic influenza.
- Providers who are members of the sentinel surveillance system will be asked to submit specimens on any cases that are of epidemiological interest, defined as those persons who recently traveled to regions where the pandemic strain of influenza is known to be circulating or those with unusual and/or severe symptoms.
- Supplementary sentinel sites will be activated.
- Existing surveillance systems will be analyzed at increased frequency.
- Active systems will be supplemented by adding additional sites. Local Active Surveillance System (LASS) information will be consolidated by Regional epidemiologists and forwarded to DHSS Senior Epidemiology specialists, or their designees. That data will be consolidated and forwarded to the Field Investigations/Surveillance lead in the Department Situation Room (DSR) and the Chief, Bureau of Communicable Disease Control and Prevention.
  - Local public health agencies (LPHAs) and their active surveillance sites will be reminded of the surveillance definition for influenza like illness (ILI). For the purposes of enhanced surveillance for influenza infections in humans: ILI is defined as documented fever >100.4°F (38.0°C) AND cough, sore throat, or shortness of breath.
  - LASS information will also be expanded to include numbers of persons hospitalized with ILI or PI, the number of hospitals with ILI/PI patients, the number of those isolated or quarantined, and the number of deaths associated with ILI/PI
    - A statewide electronic death reporting system is currently in the beginning stages of development. Currently, all LPHAs are the vital records registrars for their jurisdictions, and as such, receive notifications of deaths that occur within their jurisdiction.
  - LPHAs will be provided with a standardized active surveillance spreadsheet upon which to aggregate their data for submission. This will facilitate aggregation of the data on a Regional and Statewide basis.
- As described under Department of Health and Senior Service Responsibilities, Pandemic Alert Period: Phase 5, the DSR will be activated. The DSR Field Surveillance Officer will serve as the Surveillance Coordinator. In an Incident Center System (ICS) Branch structure, the existing disease control staff in each of five Regional offices will serve as Branch Epidemiology/Surveillance Supervisors. They will be the contact point for a team of no more than seven contract epidemiology specialists, currently in place in the LPHAs and under contract with DHSS (ICS Regional Epi Groups). Those Regional Epi

Groups will function as the liaison with the normal disease control staff in the LPHAs. Each member of the group will have responsibility for primary communication and data sharing with four to seven LPHAs. Using existing personnel, supplemented with some personnel from other regions of the state, it will be possible to staff the DSR, the Regional Branch Supervisors and the Regional Epi Groups on a 24/7 basis for an extended period. Attachment C illustrates the ICS structure for the Northwestern Region, one of five regions in the state.

**When PI is identified in Missouri:**

- The first reported case(s) will be investigated immediately by LPHA disease investigation staff to learn the details and extent of the case(s). DHSS disease control staff will be available to support LPHA disease investigation staff on a real-time basis during those first investigations. Information from the investigation(s) will be immediately relayed to the Surveillance Coordinator, following the ICS structure described in Attachment C. In the unlikely event that the first case of PI in the United States arises in Missouri, that information will go directly to the DSR and cause activation of the Regional Branch Surveillance Structure. Control and containment decisions will be made in consultation with CDC, and will be based on the information gained during those investigations(s).
- Continue case-specific (passive) and active surveillance as above until the occurrence of pandemic influenza is quantified as Regional, based on the adaptation of the CDC guidelines:
  - No Activity: No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.
  - Sporadic: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.
  - Local: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.
  - Regional: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state.
  - Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state.
- The Bureau of Communicable Disease Control and Prevention and the Section of Epidemiology for Public Health Practice will use collected data to make an estimate of the progress of the disease, and make recommendations based on that information. Those activities may include, but are not be limited to:
  - Identifying areas of increasing or decreasing incidence to make recommendations regarding local isolation, quarantine or other prevention/intervention activities.
  - Monitoring for antiviral resistance.
  - Monitoring for adverse vaccine reactions.
  - Analyzing case fatality rates, age groups affected and novel means of transmission.
  - Monitoring and instituting recommendations from CDC for any additional surveillance activities that should be undertaken given the specific circumstances.
  - Preparing reports for the Incident Commander as needed.

As the extent of PI increases from Local to Regional, surveillance activities should revert to pre-pandemic (i.e., phases 1-3) modes and surveillance activities should shift to monitoring the ability of the private medical care system to cope with increased patient loads.

- Monitor the EMS system for indications of shortages and diversions in particular facilities or regions.
- Work with Missouri Hospital Association and other entities to identify and quantify local or regional shortages.
- Use the collected information to recommend redeployment of available resources to areas of greatest need.

## *Attachment A*

### *Background: Existing Surveillance Systems and Reporting Rules*

The following outline describes the various surveillance systems currently in place in Missouri. These are the systems that are charged with detecting a case of pandemic influenza under the current circumstances.

#### I. Background: World Health Organization (WHO) Pandemic Phases

##### *A. Interpandemic period*

Phase 1: No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.

Phase 2: No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

##### *B. Pandemic alert period*

Phase 3: Human infection(s) with a new subtype but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4: Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

Phase 5: Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans but may not yet be fully transmissible (substantial pandemic risk).

##### *C. Pandemic period*

Phase 6: Pandemic: increased and sustained transmission in general population.

#### II. Two general types of surveillance, Passive and Active, plus Cooperative Zoonotic Surveillance

##### *A. Passive: Surveillance sites submit data without prompting*

###### 1. As required by [19 CSR 20-20.020](#)

([www.sos.mo.gov/adrules/csr/current/19csr/19c20-20.pdf](http://www.sos.mo.gov/adrules/csr/current/19csr/19c20-20.pdf))

###### a) Reportable Disease List

###### *(1) The diseases within the immediately reportable disease category...*

- (a) Selected high priority diseases, findings or agents that occur naturally, from accidental exposure, or as the result of a bioterrorism event: (10 diseases or conditions).
- (b) Instances, clusters, or outbreaks of unusual diseases or manifestations of illness.
- (c) Instances, clusters, or outbreaks of unusual, novel, and/or emerging diseases or findings not otherwise named in this rule.

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- (2) *Reportable within one (1) day: diseases or findings shall be reported to the local health authority or to the Department of Health and Senior Services within one (1) calendar day of first knowledge or suspicion...*
    - (a) Diseases, findings or agents that occur naturally: (35 diseases or conditions)
    - (b) Diseases, findings or adverse reactions that occur as a result of inoculation to prevent smallpox: (13 diseases or conditions)
  - (3) *Reportable within three (3) days: diseases or findings shall be reported to the local health authority or the Department of Health and Senior Services within three (3) calendar days of first knowledge or suspicion. (67 diseases or conditions)*
  - (4) *Reportable weekly: diseases or findings shall be reported directly to the Department of Health and Senior Services weekly. These diseases or findings are: Influenza, laboratory-confirmed*
  - (5) *Reportable quarterly: diseases or findings shall be reported directly to the Department of Health and Senior Services quarterly. (2 conditions)*
- b) Required Disease Reporters, Information and Timeframes (quoted from 19 CSR 20-20.020) ([www.sos.mo.gov/adrules/csr/current/19csr/19c20-20.pdf](http://www.sos.mo.gov/adrules/csr/current/19csr/19c20-20.pdf))
- (1) *Required Reporters:*
    - (a) A physician, physician's assistant, nurse, hospital, clinic, or other private or public institution providing diagnostic testing, screening or care to any person with any disease, condition or finding listed in sections (1)–(3) of this rule.
    - (b) Any person in charge of a public or private school, summer camp or child or adult care facility shall report to the local health authority or the Department of Health and Senior Services the presence or suspected presence of any diseases or findings listed in sections (1)–(4) of this rule according to the specified time frames.
  - (2) *Information to be reported:*
    - (a) Except for influenza, laboratory-confirmed and Varicella (Chickenpox); a case report as required in section (6) of this rule shall include the patient's name, home address with zip code, date of birth, age, sex, race, home phone number, name of disease, condition or finding diagnosed or suspected, the date of onset of the illness, name and address of the treating facility (if any) and the attending physician, any appropriate laboratory results, name and address of the reporter, treatment information for sexually transmitted diseases, and the date of report.
  - (3) *Special cases:*
    - (a) Influenza, laboratory-confirmed reporting as required in section (4) of this rule shall include the patient's age group (i.e., 0–4, 5–24, 25–64, and 65+ years) and serology/serotype (i.e., A, B, and unknown), the local health authority jurisdiction within which the cases occurred, and the date of report. Aggregate patient data shall be reported weekly.
    - (b) (Nosocomial MRSA & VRE as in section (5)). Each hospital and ambulatory surgical center shall report on a quarterly basis antibiogram data for infection, not colonization, from all body sites monitored by that health care facility. Antibiogram data to be reported

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shall include nosocomial methicillin sensitive *Staphylococcus aureus* (*S. aureus*), nosocomial *S. aureus*, nosocomial vancomycin sensitive enterococci, and nosocomial enterococci isolates.... Reporting shall include only a patient's first diagnostic nosocomial isolate per admission of *Staphylococcus aureus* (*S. aureus*) and enterococci and the isolates corresponding methicillin or vancomycin sensitivity... Aggregate data shall be reported for the quarters January–March, April–June, July–September, and October–December within ten (10) days of the end of the quarter.

(4) *Local Public Health Agency (LPHA) Duties:*

- (a) All local health authorities shall forward to the Department of Health and Senior Services reports of all diseases or findings listed in sections (1)–(3) of this rule. All reports shall be forwarded within twenty-four (24) hours after being received...

2. Disease-specific:

a) Influenza

(1) *Sentinel Influenza Provider System (Seasonal ILI)*

- (a) Approximately 35 private providers are recruited to tally the number of influenza like illness seen in their practice each week and submit those numbers via the web. Additionally, they are asked to collect a limited number of specimens throughout the season (i.e. two (2) – three (3) early, two (2) in the middle and two (2) late) for culturing at the State Public Health Laboratory.

b) West Nile (and other Arboviruses)

(1) *“Mosquito Pools”*

- (a) Mosquitoes, trapped by LPHA staff are submitted to Southeast MO State University for testing.

*B. Active: LPHA contacts surveillance site to elicit data.*

1. Local Active Surveillance System (LASS)

- a) LPHAs recruit a number of surveillance sites within their jurisdiction and then contact them each week to receive surveillance information.

- (1) Number and type of sites is chosen by the LPHA to reflect the general population of their jurisdiction.
- (2) Data is kept at the local level and analysis is done there. It is not routinely shared across jurisdictions, except in instances where regional (contract) Epidemiologists collect it from all of the LPHAs in their area.
- (3) The format and type of data collected is determined by each individual LPHA, except where standardized by a regional (contract) Epidemiologist.

2. DHSS-monitored Surveillance Systems

- a) Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE - [www.dhss.mo.gov/ESSENCE](http://www.dhss.mo.gov/ESSENCE))

- (1) Software maintained by Johns Hopkins University designed to analyze electronically submitted emergency department data (mandated by Reporting Rule 19 CSR 10-33.040) for significant changes in the number of individuals presenting in identified syndrome groups (ICD 9 codes). These aberrations are identified as “alerts” and are investigated as needed by state and local staff.



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- (2) To date, Public Health Event Detection and Assessment (PHEDA) staff, state epidemiologists and LPHAs have been given access to the system. By the fall of 2007, representatives from submitting hospitals will also be granted access.
  - (3) ESSENCE is maintained and monitored daily by DHSS (PHEDA staff). Data is available for analysis the next day.
  - (4) Currently, 83 out of 85 required facilities are submitting emergency department data to DHSS. See map at [www.dhss.mo.gov/ESSENCE/Missouri\\_ESSENCE\\_Map.pdf](http://www.dhss.mo.gov/ESSENCE/Missouri_ESSENCE_Map.pdf).
- b) Bioterrorism Surveillance System (BTSurv):
- (1) System designed by DHSS to analyze data voluntarily submitted by hospitals and schools for changes in eight (8) syndromic categories.
  - (2) BTSurv is maintained by PHEDA and currently consists of 40 data submitters.
  - (3) Plans are to use the BTSurv system in the future as a means to include nursing homes and to increase the number of schools enrolled in syndromic surveillance. BTSurv can avoid some of the technological limitations the electronic submissions required by ESSENCE can cause.
- c) BioSense
- (1) System maintained by CDC that analyzes data submitted electronically to DHSS (see ESSENCE for reporting rules) using similar, yet unique, statistical means to that of ESSENCE.
  - (2) PHEDA is responsible for day to day monitoring of the BioSense system. Data contributors and state and local monitors can be granted access should they wish with approval from DHSS.
  - (3) Data examined is filtered and disseminated to CDC by DHSS and, therefore, is the exact same data as that monitored by ESSENCE. The exception to this is that of a direct feed system from some St. Louis hospitals (Barnes Jewish system) that allows for real-time data availability rather than the one (1) day lag observed with most BioSense/ESSENCE hospitals. Additionally, some hospitals in the St. Louis and Kansas City areas submit laboratory and x-ray results not available in ESSENCE.
  - (4) BioSense includes data from Veterans Hospitals unlike ESSENCE.
  - (5) Over the counter drug sales and LabCorp testing results are available or will be in the near future with the BioSense system.

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### C. *Cooperative Zoonotic Surveillance Systems:*

A zoonotic influenza subcommittee was established to ensure coordination among the Missouri Departments of Agriculture; Health and Senior Services; Conservation; and Natural Resources; as well as other state partners, federal animal health agencies (United States Departments of Agriculture [USDA] and Interior [ISDI]), and associated industries. This subcommittee will provide an integrated response to cases or outbreaks of high pathogenicity avian influenza (or low pathogenicity avian influenza of zoonotic concern) in poultry, waterfowl, swine or other animals, thereby protecting human life and reducing the social, economic, and mental health impacts on Missouri's citizens and communities.

1. **Wild Bird Surveillance:** Under a cooperative agreement with the Missouri Conservation Department regarding wild birds, a wild bird surveillance plan was developed following the guidance contained in *An Early Detection System for Highly Pathogenic H5N1 Avian Influenza in Wild Migratory Birds*, published by Wild Bird High Pathogenicity Avian Influenza Interagency Working Group, composed of agencies such as the USDA, USDI, state of Alaska, and the National Association of Public Health Veterinarians. A copy of the entire plan is available on the web at: [http://www.doi.gov/issues/birdflu\\_strategicplan.pdf](http://www.doi.gov/issues/birdflu_strategicplan.pdf) (Note: see page 18 of 88 of PDF document)
2. **Domestic Bird Surveillance:** The Missouri Department of Agriculture, and USDA/Animal and Plant Health Inspection Service/Veterinary Services collaborate with the Missouri poultry industry to routinely test domestic (farm) birds and to increase surveillance/testing during crises. Information pertaining to these programs is included in the: Missouri Poultry Improvement Plan: <http://www.mda.mo.gov/Animals/poultry.htm#poultry.htm>. Agreements are in place to share detections produced by this surveillance with the Missouri Department of Health and Senior Services, through the State Public Health Veterinarian's office.
3. The entire Zoonotic Influenza Subcommittee Surveillance, Prevention, and Response Plan can be viewed on the web at: <http://www.dhss.mo.gov/PandemicInfluenza/subcommittees/zoonotic/>

## Attachment B

MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES PANDEMIC INFLUENZA CASE REPORT										PERSONAL IDENTIFICATION ONLY			
PANDEMIC INFLUENZA IS IMMEDIATELY REPORTABLE. CALL THE MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES 24 HOURS A DAY, 7 DAYS A WEEK AT (800) 362-4272 OR FAX (573) 526-2838 OR CONTACT YOUR LOCAL HEALTH DEPARTMENT										CONDITION I.D.	PARTY I.D.		
										OUTBREAK I.D.	DATE RECEIVED BY LHP		
Patient Information	NAME (LAST, FIRST, MI)			DATE OF REPORT		MEDICAL RECORD, ID# DATE, CHART NUMBER, DOB OR OTHER IDENTIFIER			GENDER <input type="checkbox"/> Male <input type="checkbox"/> Female				
	DATE OF BIRTH		SEX	VITAL STATUS		PREGNANT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK		RACE (CHECK ALL THAT APPLY) <input type="checkbox"/> ASIAN <input type="checkbox"/> WHITE <input type="checkbox"/> PACIFIC ISLANDER <input type="checkbox"/> BLACK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> AMERICAN INDIAN <input type="checkbox"/> OTHER RACE - Specify:					
	PATIENT'S COUNTRY OF ORIGIN			DATE ARRIVED IN US									
	ADDRESS (HOMELESS SHELTER)			CITY, STATE, ZIP CODE			COUNTY OF RESIDENCE		PRIMARY (HOME) TELEPHONE				
	PATIENT'S HOME ADDRESS			ALTERNATE CONTACT NAME		ALT CONTACT TEL. #		ALT CONTACT RELATIONSHIP		ALT CONTACT E-MAIL			
	TRAVEL MORE THAN 25 MILES FROM HOME WITHIN 7 DAYS OF ONSET OF SYMPTOMS <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK										FREQUENT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK		PARENT OR GUARDIAN
	DEPARTURE DATE			RETURN DATE			TRAVEL LOCATION (ATTACH ITINERARY IF POSSIBLE)			DUE DATE:			
	WAS PATIENT HOSPITALIZED? <input type="checkbox"/> YES <input type="checkbox"/> NO		NAME OF HOSPITAL			HOSPITAL ADDRESS		HOSPITAL CITY, STATE, ZIP CODE		HOSPITAL TELEPHONE			
	OCCUPATION			WORK TEL. #		OTHER ASSOCIATED CASES? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK		PATIENT DIED OF THIS ILLNESS <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK		DATE OF DEATH			
	Reporter	REPORTER NAME			REPORTER ADDRESS			CITY, STATE, ZIP CODE			REPORTER TELEPHONE		
TYPE OF REPORTING AGENCY: <input type="checkbox"/> PHYSICIAN <input type="checkbox"/> OUTPATIENT CLINIC <input type="checkbox"/> HOSPITAL <input type="checkbox"/> LABORATORY <input type="checkbox"/> SCHOOL <input type="checkbox"/> OTHER:			ATTENDING PHYSICIAN'S NAME			PHYSICIAN TELEPHONE			WAS PATIENT BEEN NOTIFIED OF DIAGNOSIS OR RESULTS? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK				
			PHYSICIAN ADDRESS			CITY, STATE, ZIP CODE			PHYSICIAN E-MAIL				
Risk Information	CHECK BELOW IF PATIENT OR MEMBER OF PATIENT'S HOUSEHOLD (PHHD):			PATIENT			HOUSEHOLD			IF YES, PROVIDE BUSINESS NAME, ADDRESS AND TELEPHONE NUMBER			
				YES	NO	UNK	YES	NO	UNK				
	IS A HEALTH CARE WORKER?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	IS A STUDENT OR FACULTY OF A SCHOOL?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	ASSOCIATED WITH OR ATTENDS CHILD ADULT CARE CENTER?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	ASSOCIATED WITH OR RESIDENT OF NURSING HOME?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	ASSOCIATED WITH HOMELESS SHELTER OR CORRECTIONAL FACILITY?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	CONTACT WITH PERSON(S) WITH SIMILAR ILLNESS?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	CONTACT:												
	CONTACTS: (ATTACH ADDITIONAL SHEET IF NECESSARY)												
Disease	DISEASE NAME(S)			ONSET DATE(S)		DIAGNOSIS DATE(S)		SEVERITY OF ILLNESS <input type="checkbox"/> MILD <input type="checkbox"/> MODERATE <input type="checkbox"/> SEVERE		VACCINATION HISTORY DATES Seasonal Influenza Vaccine: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK DATE: Pneumococcal Vaccine: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK DATE:			
Symptoms	DATE OF ONSET OF FIRST SYMPTOM (MM/DD/YYYY)			<input type="checkbox"/> FEVER > 38 C		<input type="checkbox"/> RHINORRHEA		<input type="checkbox"/> ABDOMINAL PAIN		OTHER PERTINENT INFORMATION			
				<input type="checkbox"/> COUGH		<input type="checkbox"/> CONJUNCTIVITIS		<input type="checkbox"/> NAUSEA					
SIGNS AND SYMPTOMS CHECK ALL THAT APPLY			<input type="checkbox"/> DYSPNOEA		<input type="checkbox"/> MYALGIA		<input type="checkbox"/> VOMITING						
			<input type="checkbox"/> SORE THROAT		<input type="checkbox"/> FATIGUE		<input type="checkbox"/> DIARRHEA						
			<input type="checkbox"/> HEADACHE		OTHER:								
Diagnostics	DO NOT COMPLETE IF LAB SLIP IS ATTACHED												
	RESULT DATE (MM/DD/YYYY)	TYPE OF TEST	SPECIMEN TYPE/SOURCE	SPECIMEN DATE (MM/DD/YYYY)	QUALITATIVE/QUANTITATIVE RESULTS	LABORATORY NAME/ADDRESS (STREET, CITY, STATE, ZIP CODE) OR BRAND OF RAPID TEST							
Treatment	TYPE OF TREATMENT (HEDS) IF NOT TREATED, LIST REASON			DOSE/AMT	TREATMENT DATE (MM/DD/YYYY)	TREATMENT DURATION (IN DAYS)	PREVIOUS MEDICATIONS USED FOR TREATMENT		PREVIOUS TREATMENT FACILITY	TELEPHONE NUMBER			

HDS-6-6779 (10-1-04)

CD-1-P

## Attachment C

### Incident Command System (ICS) Regional Branch Surveillance Structure Northwestern Region

DSR	Branch Level	Group Level	LPHA
Surveillance Coordinator: DSR_Field_Surveillance_Officer	Branch Epidemiology Supervisor: NW Regional Sr Epi Specialist NW Regional CD Coordinator (ES) NW Regional Epi Specialist	NW Surveillance Group 1	Andrew
		Buchanan Independence Andrew Henry Contract ES Contract ES Contract ES Contract ES	Atchison
			Buchanan
			Holt
			Nodaway
		NW Surveillance Group 2	Clinton
		Clinton KCMO Daviess Caldwell Contract ES Contract ES Contract ES Contract ES	Daviess
			Grundy
			Harrison
			Mercer
			Tricounty
		NW Surveillance Group 3	Clay
		KCMO Jackson Clay Platte Contract ES Contract ES Contract ES Contract ES	Independence
			Jackson
			KCMO
			Platte
		NW Surveillance Group 4	Caldwell
		Lafayette Saline Carroll Ray Contract ES Contract ES Contract ES Contract ES	Carroll
			Lafayette
			Livingston
			Ray
			Saline
		NW Surveillance Group 5	Bates
		Pettis Cass Bates Assigned ES Contract ES Contract ES Contract ES	Benton
			Cass
			Henry
			Johnson
			Pettis